

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-13 (Cancelled).

Claim 14 (Previously Presented): A distance detecting apparatus comprising:

a light emitting unit that emits a light in a light emitting direction which is the direction to an object, the light having a plurality of pattern lights which are in the form of a line, the pattern lights being parallel to each other;

a photographing device that obtains an image of the object along a photographing direction; and

a distance deriving unit that derives a distance between the object and a predetermined position based on an interval between the pattern lights in the image.

Claim 15 (Previously Presented): An airbag system controlling apparatus comprising:

a light emitting unit that emits a light in a light emitting direction which is the direction to an object seated in a seat of a vehicle, the light having a plurality of pattern lights which are in the form of a line, the pattern lights being parallel to each other;

a photographing device that obtains an image of the object along a photographing direction;

a distance deriving unit that derives a distance between the object and a predetermined position based on an interval between at least two of the pattern lights in the image; and

an air bag system controlling unit that controls an operation of an air bag based on the distance derived.

Claim 16 (Original): The air bag system controlling apparatus according to claim 15, wherein the distance deriving unit stores a relation between intervals between the distributed pattern of the light in the image and distances, and derives the distance by referring to the relation stored.

Claim 17 (Original): The air bag system controlling apparatus according to claim 15, wherein the light emitting unit emits a infrared light, and
the photographing device obtains an infrared image.

Claim 18 (Original): The air bag system controlling apparatus according to claim 15, wherein the light emitting unit emits the light when an operation of the air bag system controlling unit is required, and
the distance deriving unit derives the distance based on the image when the light emitting unit emits the light.

Claim 19 (Previously Presented): An airbag system controlling apparatus comprising:
a light emitting unit that emits a light in a light emitting direction which is the direction to an object seated in a seat of a vehicle, the light having a plurality of pattern lights which are in the form of a line, the pattern lights being parallel to each other;
a photographing device that obtains an image of the object along a photographing direction;

a memory that stores a computer program that makes it possible to execute a function of deriving a distance between the object and a predetermined position based on an interval between at least two of the pattern lights in the image obtained by the photographing device, and a function of controlling an operation of an air bag based on the distance derived; and

a processor that can access the memory unit and execute the computer program.

Claim 20 (Original): The air bag system controlling apparatus according to claim 19, wherein the light emitting unit emits a infrared light, and the photographing device obtains an infrared image.

Claim 21 (Original): The air bag system controlling apparatus according to claim 19, wherein the light emitting unit emits the light when an operation of the air bag system controlling unit is required, and the distance deriving unit derives the distance based on the image when the light emitting unit emits the light.

Claim 22 (Cancelled).

Claim 23 (Previously Presented): A method of detecting a distance, comprising: emitting light in a light emitting direction to thereby irradiate an object, the light having a plurality of pattern lights which are in the form of a line, the pattern lights being parallel to each other; obtaining an image of the object along a photographing direction; and deriving a distance between the object and a predetermined position based on an interval between the pattern lights in the image.